| Index of Claims |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
|                 |  |  |  |  |  |  |  |  |  |  |  |  |  |

| Applica | tion/Control | No. |
|---------|--------------|-----|
|         |              |     |
|         |              |     |

10/680,334

HARMER ET AL.

Applicant(s)/Patent under Reexamination

35

Examiner

Art Unit

Jonas N. Strickland

1754

✓ Rejected
= Allowed

| - | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| Z | Non-Elected  |
|---|--------------|
| ı | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

|                 |          | _          | _        |            |  |                  | _        |          |          |          |              |          |           |         | -      |          |           | '        |              |          |          |          | -        | , ,        |          |                    |                  |          | _        |          | j               |
|-----------------|----------|------------|----------|------------|--|------------------|----------|----------|----------|----------|--------------|----------|-----------|---------|--------|----------|-----------|----------|--------------|----------|----------|----------|----------|------------|----------|--------------------|------------------|----------|----------|----------|-----------------|
| CI              | alm      | Γ          |          |            |  | Dat              | le       |          |          |          |              | laim     | I         |         |        |          |           | ate      | ,            |          |          |          | C        | aim        |          |                    |                  | Da       | è        |          |                 |
| Final           | Ortginal |            |          |            |  |                  |          |          |          |          | Final        | Orldinal |           |         |        |          |           |          |              |          |          |          | Final    | Original   |          |                    |                  |          |          |          |                 |
| <b>-</b>        | 1        | ┝          | ╀        | ├          | ╀  | -                | ╀        | ╀        | H        | Н        | <b> </b>     | 5        | _         | 4       | 4      | 4        | 4         | -        | 4            | -        |          | $\dashv$ | <b>—</b> | 101        | 4        | +                  | ╀                | ╀        | ╀        | <u> </u> | Н               |
| $\vdash$        | -        | ╁╌         | ┢        | -          | ╁╴   | ╁╌               | ╁╌       | ╁╾       | ┢        | Н        | <del> </del> | 1 \$     |           | ┪       | ┪      | ┪        | ┥         | $\dashv$ | ᅥ            | $\dashv$ | $\dashv$ | $\dashv$ | $\vdash$ | 102        | $\dashv$ | +                  | ╫                | ╁        | ╀        | H        | ┝╌╂╸            |
| $\vdash$        | 1        | ┪          | ┢        | ┢          | ╁  | ╁                | ╁        | ╁        | ╁        | Н        |              | 1 \$     | $\dagger$ | ┪       | ┪      | ┪        | ┪         |          | -            | $\dashv$ | $\dashv$ | $\dashv$ | -        | 103        | $\dashv$ | ┿                  | +                | ╁        | ╁╌       | $\vdash$ | $\vdash \vdash$ |
|                 | 1        | T          | T        | Н          | т  | T                | †        | 1        | 1        | Н        |              | 13       | 1         | ┪       | ┪      | 寸        | ┪         | ┪        | ┪            | ┪        | 7        | ┥.       | <b>—</b> | 104        | _        | +                  | 十                | ╈        | ╁        | Н        |                 |
|                 | 1        | T          | T        | Г          |  | T                | T        | 1        | t        | П        |              | 13       | 1         | 7       | 7      | T        | ┪         | ┪        | ┪            | 7        | 寸        | _        | $\vdash$ | 105        | $\dashv$ | +                  | +-               | 十        | t        | Н        |                 |
|                 | Б        |            | П        |            | ŀ  |                  | Т        | Т        | Î        | П        |              | 5        | 7         | 寸       | T      | T        |           | ┪        |              | $\neg$   |          | ┨.       |          | 106        |          | 十                  | †                | 1-       | t        | Н        | 一十              |
|                 | 7        |            |          |            | Ι  | П                |          | Π        |          |          |              | 57       | '  s      | =1      |        |          |           |          |              |          |          |          | 7        | 107        |          | ╅                  | 1                | T        | T        | П        | _               |
|                 | В        |            |          |            |  |                  |          |          | L        |          |              | _58      |           | ≣       | $\Box$ |          |           |          |              |          |          |          |          | 108        |          |                    |                  |          |          |          |                 |
|                 | 1        | L          |          | lacksquare | L  | $ldsymbol{oxed}$ | 上        | L        | L        |          |              | 59       |           | $\Box$  |        |          |           | $\Box$   | $\Box$       |          | $\Box$   |          |          | 109        |          | ${\mathbb T}$      | Ι                |          |          |          |                 |
| <u> </u>        | 12       | <b>!</b> _ | ┖        | <u> </u>   | ╙  | ┖                | ╄        | ╄        | Ļ        | Ш        | ·            | 60       |           | 4       | _      | 4        | _         | _        | _            | $\Box$   |          | _        | L        | 110        | $\perp$  | $\perp$            |                  | L        |          |          |                 |
| <b></b>         | 1        | <b> </b>   | <b>—</b> | L          | ₩  | -                | ╀        | ╀        | ┡        | Н        | -            | 61       |           | 4       | 4      | 4        | 4         | 4        | 4            | _        | _        | 4        | <u> </u> | 111        | $\bot$   | 4                  | $\bot$           | ┡        | ┺        | Ш        | $\vdash$        |
|                 | 12       | $\vdash$   | $\vdash$ | $\vdash$   | -  | -                | ⊢        | ⊢        | ⊢        | Н        | $\vdash$     | 62       |           | 4       | 4      | 4        |           | _        | 4            | -        | -        | 4        | -        | 112        | -        | - -                | ╄-               | 1        | _        | Щ        | $\vdash$        |
| -               | 18<br>14 | ⊢          | $\vdash$ | $\vdash$   | ⊢  | <del> </del>     | ⊢        | ₩        | ₩        | Н        | <b>—</b>     | 65       |           | 4       | 4      | -+       | 4         | 4        | _            |          | -        | 4        | -        | 113        |          | +                  | ╀                | ╀        | _        | Щ        | $\vdash \vdash$ |
| -               | 15       | $\vdash$   | $\vdash$ | ⊢          | ╀╌   | $\vdash$         | ⊢        | +        | $\vdash$ | Н        | $\vdash$     | 64<br>65 | +         | +       | -+     | +        | $\dashv$  | $\dashv$ | -            |          | -+       | $\dashv$ | $\vdash$ | 114        | -        | +                  | +                | $\vdash$ | -        | Н        | $\vdash \vdash$ |
| $\vdash$        | 16       | ╌          | ╁╌       | ┢          | ┢  | ⊢                | ╁╌       | ╁┈       | ⊢        | Н        | $\vdash$     | 66       |           | ┪       | ┪      | ┪        | ┪         | $\dashv$ | $\dashv$     | $\dashv$ | $\dashv$ | $\dashv$ | -        | 115<br>116 | -        | ╁                  | ╁                | ╂        | ╁╌       | Н        | $\vdash$        |
| $\vdash$        | 1        | Н          | t        | ┢          | ┢  | Н                | $\vdash$ | t        | 一        | Н        | $\vdash$     | 67       |           | +       | ╅      | ╅        | ┪         | ┪        | +            | ╅        | ┪        | -        | $\vdash$ | 117        | +        | ╁                  | ╁                | ╁        | ⊢        | Н        | +               |
|                 | 18       | Н          | 一        | -          | <del>                                     </del> | ┪                | ╁        | 十        | ┢        | Н        | $\vdash$     | 68       |           | +       | 7      | ┪        | ┪         | 寸        | ┪            | -        | ┪        | $\dashv$ | $\vdash$ | 118        |          | ╫                  | ╁╌               | ╁╴       | Н        | Н        |                 |
|                 | 1/5      | T          | T        | Н          | ┢  | ┪                | T        | T        |          | Н        | <u> </u>     | 69       |           | 寸       | 7      | 7        | ┪         | ┪        | 7            | 7        | ┪        | $\dashv$ |          | 119        | +        | 十                  | ╁                | ┪        | H        | Н        | $\dashv$        |
|                 | 20       | $\vdash$   | Г        |            | $\vdash$   | 1                | T        | Т        | Т        | П        | $\vdash$     | 70       |           | ┪       | 7      | 寸        | ┪         | ┪        | ┪            | 7        | 寸        | ┪        |          | 120        | $\neg$   | 十                  | 十                | t        | H        | Н        | $\vdash$        |
|                 | 21       |            |          |            | Г  |                  | П        | П        | П        | П        |              | 71       | T         | ┪       | T      |          | 1         | ┪        | $\neg$       | 丁        | $\neg$   | ┑.       |          | 121        | $\neg$   | $\top$             | Τ                | Т        | T        |          | <u> </u>        |
|                 | 22       |            |          |            |  |                  |          |          |          |          |              | 72       |           | Т       |        | T        |           |          | 丁            | T        |          |          |          | 122        |          | ┰                  | Τ                | 尴        | Г        |          | $\Box$          |
|                 | 23       |            |          |            |  |                  | L        | 匚        |          |          |              | 73       |           | $\Box$  |        |          |           |          |              |          | $\Box$   |          |          | 123        |          | $oxed{\mathbb{L}}$ | $\mathbf{I}_{-}$ |          |          |          |                 |
| Ш               | 24       | _          |          |            | L.   | L                | L        | L        |          | Ш        | _            | 74       |           | $\perp$ |        |          |           |          |              | $\Box$   |          |          |          | 124        |          |                    |                  |          |          |          |                 |
|                 | _        | <b>투</b>   | _        |            | Ļ  | ㄴ                | L        | ╙        |          | Ш        | _            | 75       |           | 4       | 4      | _        | 4         | $\dashv$ | _            | _        | _        | _        |          | 125        |          | $\perp$            | oxdot            |          |          |          | $\Box$          |
| Щ               | 26       | $\mu$      | ┡        | Щ          | <u> </u>   | L-               | ┞        | ╙        | Ш        | Щ        |              | 76       |           | 4       | 4      | 4        | 4         | 4        | _            | 4        | _        | _        | <u></u>  | 126        | ┵        | ┸                  | ╄                | ᆫ        |          | Ш        |                 |
| -               | 27       | =          | <u> </u> | $\vdash$   | L  | L                | ┡        | ļ        | $\vdash$ | Н        | $\vdash$     | 77       |           | 4       | 4      | 4        | 4         | 4        | -            | -        | 4        | 4        | $\vdash$ | 127        | -        | 1                  | 1                | ┖        | Ш        |          | $\dashv$        |
| Н               | 28<br>29 | -          | H        | _          |  | ├                | ⊢        | ┢        | Н        | Н        | -            | 78       |           | +       | +      | +        | -+        | -        | 4            | $\dashv$ |          |          | $\vdash$ | 128        | 4-       | <del> </del>       | ╀                | ▙        | Щ        | Н        | -               |
|                 | 213      | $\vdash$   | Ι        | _          |  | ├                | ├        | ⊢        | Н        | Н        | -            | 79<br>80 |           | +       | ┥      | $\dashv$ | -         | ┥        | ┥            | $\dashv$ | +        |          | $\vdash$ | 129        | +        | +-                 | ╀                | ┞        | -        | Н        | +               |
| $\vdash$        | 31       | $\vdash$   | H        | Н          | $\vdash$   | ┝                | ┢        | ⊢        | Н        | Н        | -            | 81       |           | +       | +      | +        | +         | ╛        | $\dashv$     | ┥        | ┰        |          | -        | 131        |          | ╀                  | ╀                | -        | Н        | $\vdash$ | -               |
| $\vdash$        | 12       | $\vdash$   | Н        | -          |  | ┢                | ┢        | $\vdash$ | Н        | Н        | ┝            | 82       |           | 十       | +      | ╅        | $\dashv$  | ╅        | +            | ┪        | $\dashv$ | $\dashv$ | $\vdash$ | 132        |          | ╫                  | ╁                | ⊢        | Н        | $\dashv$ | +               |
| Н               | 33       | Н          | Н        |            | -  | $\vdash$         | ┢        | H        | П        | $\neg$   |              | 83       |           | +       | +      | +        | ┪         | $\dashv$ | +            | ┪        | ┪        | ┥.       | -        | 133        | +        | ╁                  | ╁╌               | ┢╾       | Н        | $\dashv$ | +               |
| М               | 34       |            | П        |            |  | П                | Г        | П        | М        | П        |              | 84       |           | †       | 十      | 7        | 7         | 7        | 7            | $\dashv$ | _        | 1        |          | 134        | +        | +                  | t                | 1        | Н        | 一        | 十               |
|                 | 35       |            |          |            |  |                  |          |          |          |          |              | 85       |           | _†      | ⇉      |          | _†        | _        | _†           | _†       |          | 7        |          | 135        | _        | 十                  | T                | Г        | Н        | 一        | 十               |
|                 | 36       |            |          |            |  |                  |          |          |          |          |              | 86       |           | I       | I      | Ī        |           |          |              | 丁        | 丁        | J        |          | 136        |          | T                  | $\mathbf{I}^{-}$ |          |          | 一        | ⇉               |
|                 | 3        |            |          |            |  |                  |          |          |          |          |              | 87       |           | I       |        | Ι        | I         |          | I            | J        | $\Box$   |          |          | 137        |          | Г                  | I                |          |          |          | I               |
| $oxed{oxed}$    | 38       |            |          |            | Щ  |                  | $\Box$   |          |          | Ц        |              | 88       |           | 1       | $\Box$ | Ţ        | I         | Ţ        | Ţ            | $\Box$   | $\Box$   | $\Box$   |          | 138        |          | Ι                  |                  |          |          |          | $\perp$         |
| igsquare        | 39       | Ц          | Ш        |            | Щ  |                  | Щ        | Щ        | Ш        | Ц        | L            | 89       | 1         | 4       | 4      | $\perp$  | 1         | 4        | $\downarrow$ | $\bot$   | $\bot$   | Ц.       |          | 139        |          | I                  | 匚                |          |          |          | $\perp$         |
| $\vdash \vdash$ | 40       | Ц          | Ц        | _          |  | Щ                | H        | Н        | Щ        | _        | <u> </u>     | 90       | +         | 4       | 4      | 4        | 4         | 4        | 4            | 4        | 4        | 4        |          | 140        | _        | 1                  | L                | L.       | Ш        | _        | $\bot$          |
| ┝─┤             | 41       | Ц          | H        | _          | Н  | -                | $\vdash$ | Н        | Щ        | $\dashv$ | <b>—</b>     | 91       | +         | 4       | 4      | 4        | 4         | 4        | 4            | 4        | 4        | 4        | <b> </b> | 141        |          | 1                  | ╄                | <u> </u> | Ш        | _        | ᆜ-              |
| ├─┤             | 42<br>43 | Н          |          | 4          | Ш  | Щ                | Н        | Н        | Н        | 4        | _            | 92       | +         | +       | +      | +        | +         | 4        | 4            | +        | 4        | 4        | $\vdash$ | 142        | +        | ╀                  | ╀-               | Ш        | Ш        | _        | 4               |
| ┝╼┥             | 14       | _          | $\dashv$ | -          | -  | Н                | Н        | Н        | Н        | $\dashv$ |              | 93       | ╀         | +       | +      | +        | +         | +        | +            | +        | +        | 4        | $\vdash$ | 143        | +        | +-                 | ╀                | $\vdash$ | Н        | -        | +               |
| ┝╼╅             | 15       | $\dashv$   | $\dashv$ |            | Н  | Н                | Н        | $\vdash$ | $\dashv$ | $\dashv$ | $\vdash$     | 95       | ╁         | +       | +      | +        | +         | +        | +            | +        | +        | $\dashv$ | -        | 144        | +        | ╁╌                 | ╁                | $\vdash$ | Н        | $\dashv$ | +               |
| ├─┤             | 16       | -          | $\dashv$ | 긤          | $\dashv$   |                  | H        | Н        |          | $\dashv$ | $\vdash$     | 96       | +         | +       | +      | +        | +         | +        | ╅            | +        | +        | $\dashv$ | 1-       | 146        | +        | ╁                  | ╂                | $\vdash$ | Н        | -        | +               |
| $\vdash$        | 新        | ᅥ          | ┪        | ᅱ          | $\dashv$   | Н                | Н        | Н        | ┪        | $\dashv$ | -            | 97       | ╈         | 十       | 十      | ╅        | +         | +        | +            | ╅        | $\dashv$ | 4        | $\vdash$ | 147        | +-       | +                  | +                | Н        | Н        | -        | +               |
| $\Box$          | 48       |            | $\dashv$ | $\dashv$   | $\dashv$   | $\dashv$         | Н        | H        | $\dashv$ | ヿ        |              | 98       | 十         | 十       | 十      | ╅        | $\dagger$ | +        | T            | 十        | 十        | ┥        | $\vdash$ | 148        | +        | T                  | ╁                | H        | Н        | ┪        | +               |
|                 | 49       | _          | 7        | $\neg$     |  | $\neg$           |          | Н        |          | 7        |              | 99       | †         | 十       | +      | $\top$   | †         | +        | $\dagger$    | $\dashv$ | $\dashv$ | ヿ゙       |          | 149        | +        | T                  | Т                | Н        | $\vdash$ | ╗        | +               |
|                 | \$0      | コ          |          | 寸          |  |                  |          | П        | ┪        | 7        |              | 100      | 1         | T       | 十      | 十        | $\top$    | 7        | $\top$       | 十        | 7        | ٦        | $\Box$   | 150        | 十        | T                  | 1                | Н        | H        | 十        | 十               |
|                 |          |            | _        | _          |  | _                | _        | _        | _        |          | _            |          | _         | _       | _      |          | _         | _        |              |          | _        | _        |          |            | —        | _                  | •                | _        | ئـــــــ | _        | —               |